

REMARKS

Applicants thank Examiners Friend and Epperson for their courtesy extended in the interview with inventor Ilya Ravkin and applicants' undersigned attorney on April 29, 2003. In the interview, references Castro et al. and Nova et al. were discussed, along with possible amendments to clarify and distinguish the claimed invention over prior art.

This amendment supplements and should be considered together with applicants' response (mailed on January 27, 2003) to the pending Office action.

Claim 26 has been amended to recite that the image analysis system produces a mask for each carrier or set of carriers having the same code, and measures one or more reporting modalities within each mask. In this way, the system is able to correlate assay results with carrier and analyte identity, thus enabling multiplexing on a surface, for example, the bottom of a microplate well. Support for this amendment can be found in U.S. Provisional Patent Application Serial No. 60/129,664 (incorporated by reference) beginning on page 7, second paragraph, where it describes the production of masks in relation to colored beads, and in the last paragraph on page 7 relating to measuring reporting modalities within the carrier mask. The amendment is also supported in the subject application in Figure 12, on page 17, lines 18-20, and on page 21, lines 12-17.

New claims 60-68 have been added.

New claim 60, which depends from claim 26, recites that the carriers are flat. Flat carrier shape is an advantageous configuration, particularly for imaging and optical analysis, as mentioned on page 19, lines 4 and 5 of the specification.

New claim 61, which depends from claim 26, recites that the carrier is at least partially transparent. Support for this claim can be found on page 13, lines 9 and 10.

New claims 62 and 63, which depend from claim 26, recite that the reporting modality is a fluorescent color or an absorptive color, respectively. Support for these claims can be found on page 7, last paragraph, in U.S. Provisional Patent Application Serial No. 60/129,664 (incorporated by reference).

New claims 64 and 65, which depend from claim 33, recite that the digital image is corrected for background variation or thresholded, respectively. Support for these claims can be found on page 6, fourth paragraph, in U.S. Provisional Patent Application Serial No. 60/129,664 (incorporated by reference).

New independent claim 66 is similar to claim 26 (prior to this amendment) with an additional statement that the carriers are flat. The advantages of flat carriers and the support for this claim are discussed above, under new claim 60.

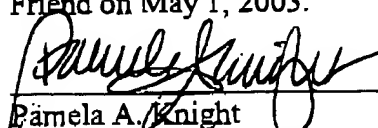
New claim 67, which depends from claim 66, recites that the carrier is at least partially transparent. The support for this claim is discussed above, under new claim 61.

New independent claim 68 is similar to claim 26 (prior to this amendment) with an additional statement that the image analysis system uses code information from the image to interpret experiments on the analytes by determining codes and positions of the carriers prior to measuring reporting modalities associated with analytes on identified carriers. Support for this claim can be found in the same portion of the specification mentioned above with respect to claim 1.

Applicants believe all of the pending claims, as now amended, are patentable over the art of record. Please contact applicants' attorney if there are any further issues to address.

CERTIFICATE OF FACSIMILE

I hereby certify that this correspondence is being sent via facsimile to fax number (703) 308-2742, Attention: Examiner Tomas Friend on May 1, 2003.


Pamela A. Knight

Date of Signature: May 1, 2003

Respectfully submitted,

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